

DISEÑO DE INTERFACES WEB

MARIO PUERTAS MUCIENTES

2ºDAW

Cards

Cards contain content and actions about a single subject.

`design_services`Design

`integration_instructions`Implementation

Contents

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- [Anatomy](#)
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Interactive demolink

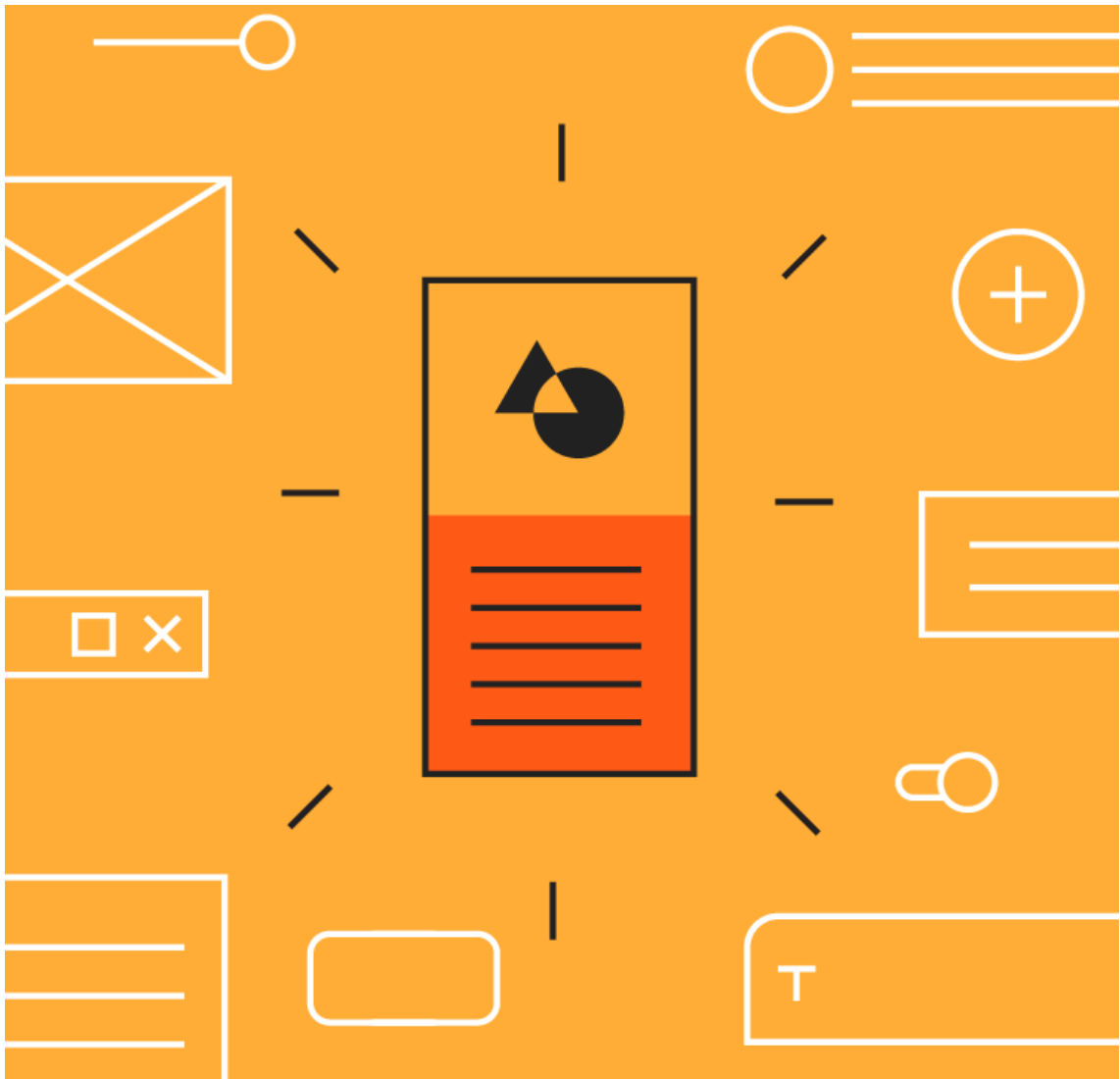
This demo lets you preview the card component, its variations, and configuration options. Each tab displays a different type of card.

Usagelink

Cards are surfaces that display content and actions on a single topic.

They should be easy to scan for relevant and actionable information. Elements, like text and images, should be placed on them in a way that clearly indicates hierarchy.

Principles



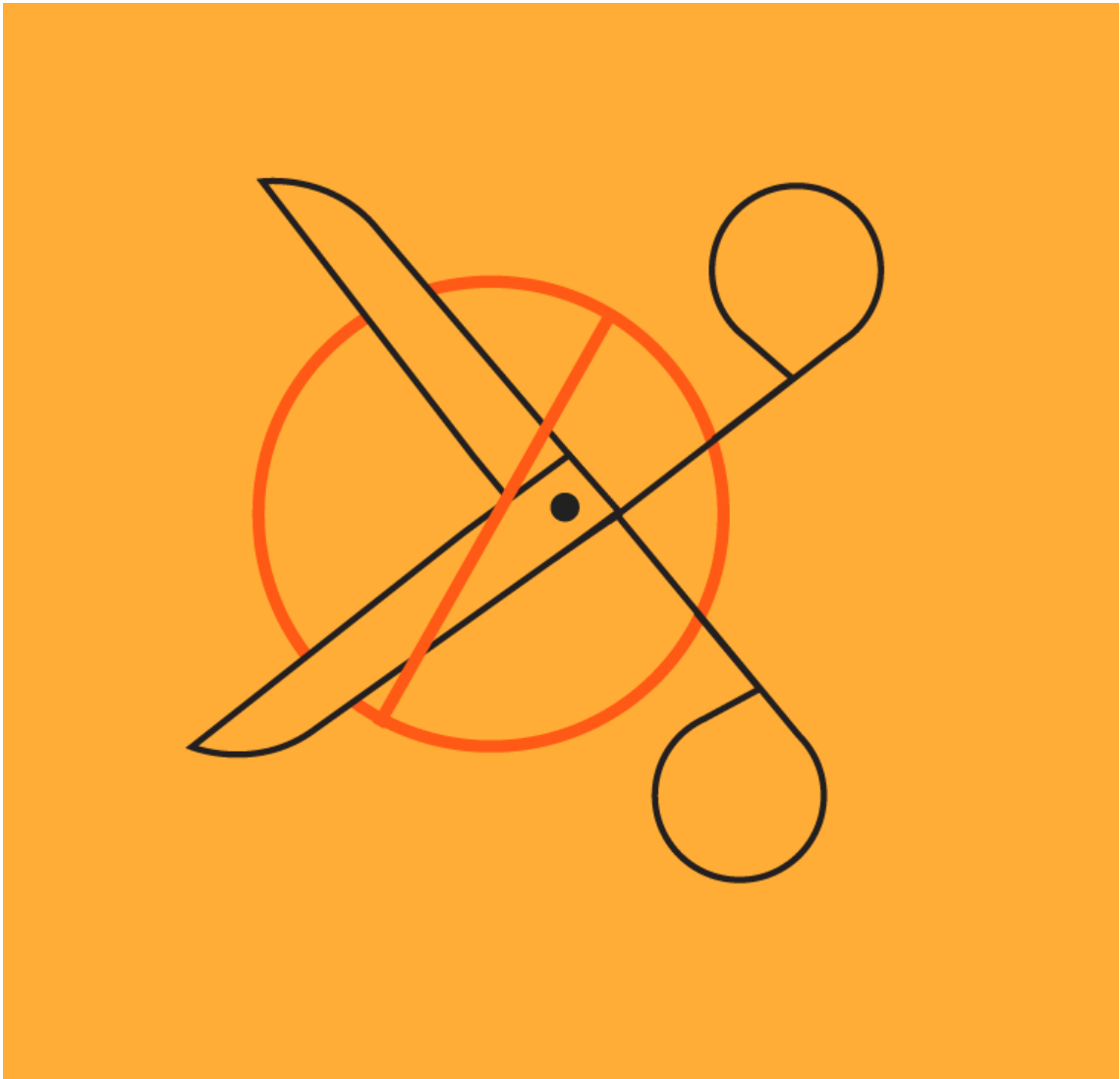
Contained

A card is identifiable as a single, contained unit.



Independent

A card can stand alone, without relying on surrounding elements for context.



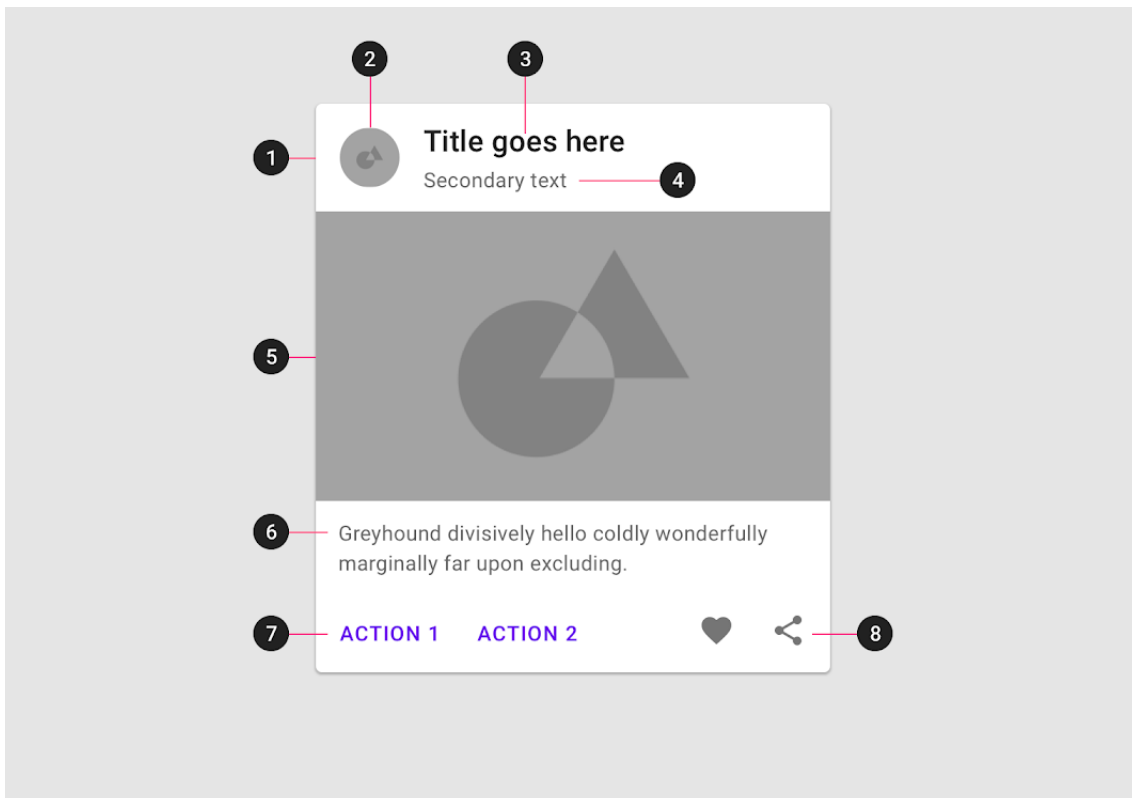
Individual

A card cannot merge with another card, or divide into multiple cards.

Anatomylink

The card container is the only required element in a card. All other elements shown here are optional.

Card layouts can vary to support the types of content they contain. The following elements are commonly found among that variety.



1. Container

Card containers hold all card elements, and their size is determined by the space those elements occupy. Card elevation is expressed by the container.

2. Thumbnail [optional]

Cards can include thumbnails to display an avatar, logo, or icon.

3. Header text [optional]

Header text can include things like the name of a photo album or article.

4. Subhead [optional]

Subhead text can include text elements such as an article byline or a tagged location.

5. Media [optional]

Cards can include a variety of media, including photos, and graphics, such as weather icons.

6. Supporting text [optional]

Supporting text include text like an article summary or a restaurant description.

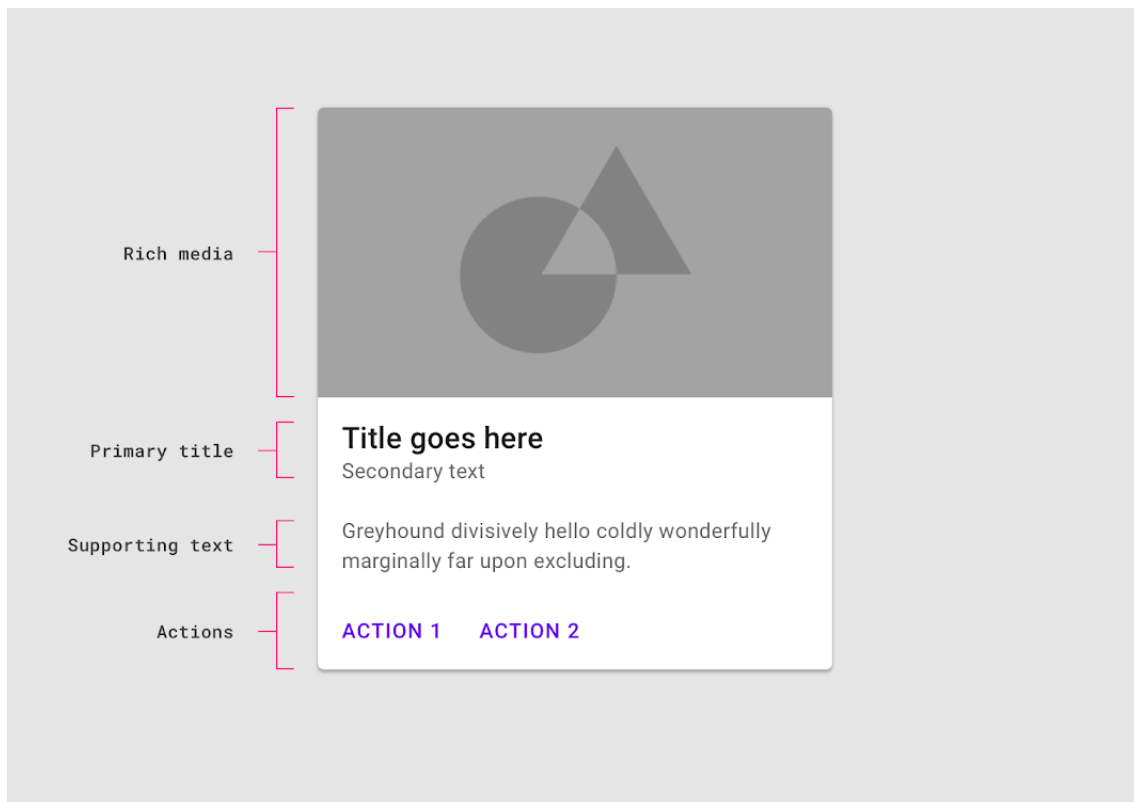
7. Buttons [optional]

Cards can include buttons for actions.

8. Icons [optional]

Cards can include icons for actions.

Each card is made up of content blocks. All of the blocks, as a whole, are related to a single subject or destination. Content can receive different levels of emphasis, depending on its level of hierarchy.

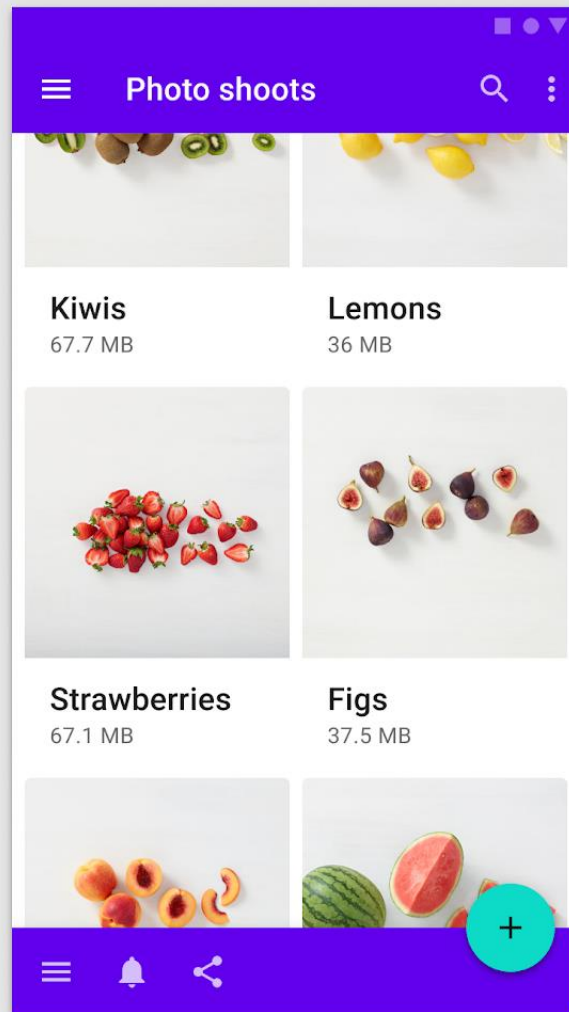


Cards contain rich media, primary title, supporting text, and actions.

Containment

Implicit containment

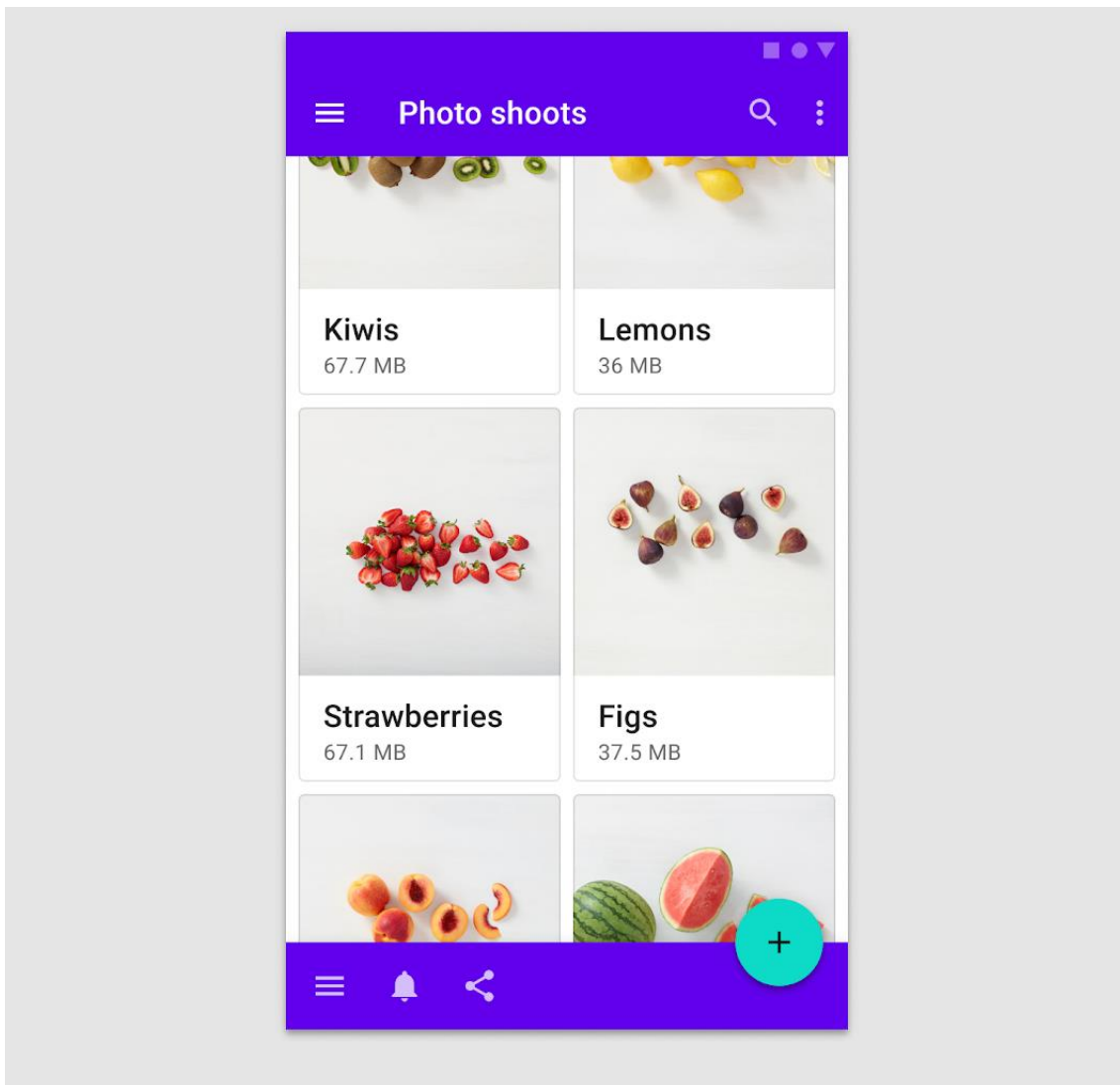
An implicit container groups content or elements and may appear to have no edges, creating an implied boundary. Use implicit containment to group content and subtly reinforce the cohesion of a contained unit.



Implicit containers create separation through proximity and open space

Explicit containment

An explicit container shows clear, visible boundaries. It can be tappable, and can be used to provide emphasis.

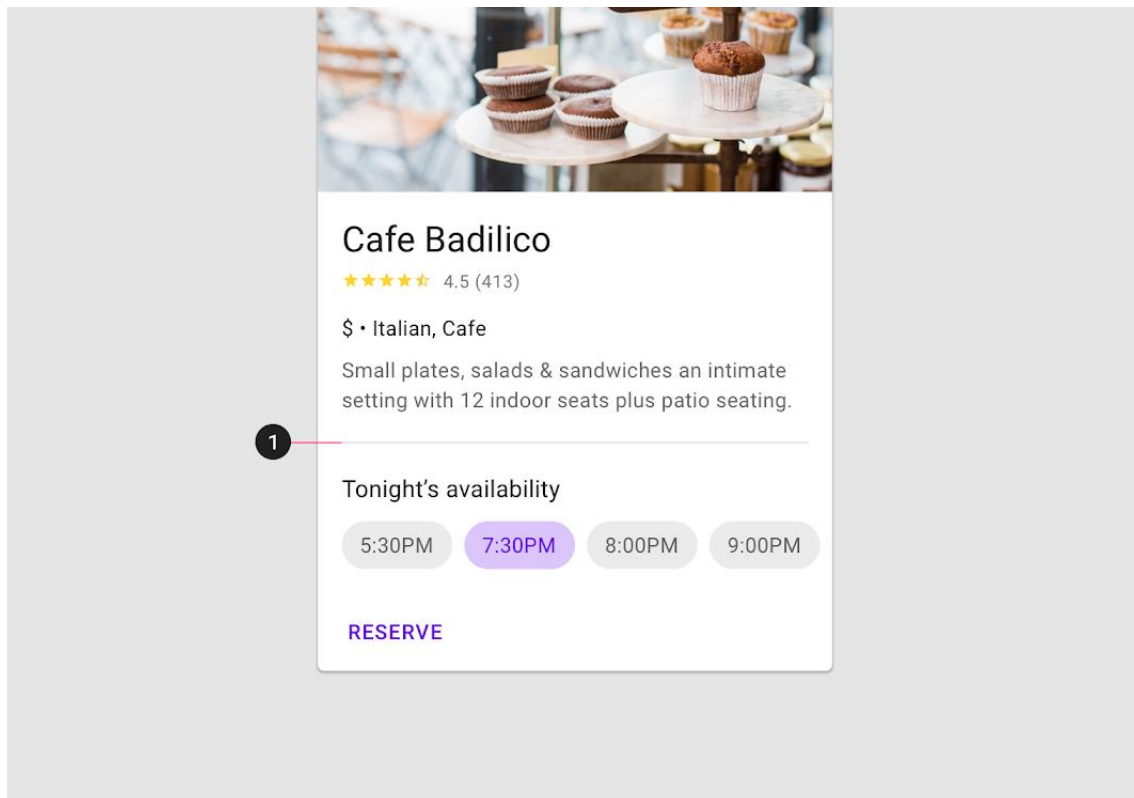


Explicit containers create separation using visible boundaries

Dividers

Dividers can be used to separate regions in cards or to indicate areas of a card that can expand. A divider is a thin, lightweight...

Dividers can be used to separate regions in cards or to indicate areas of a card that can expand.



Use inset dividers (1), dividers that do not run the full length of a card, to separate related content.

Content that can be expanded should use full-width dividers.

Dividers

A divider is a thin, lightweight rule that groups content in lists and page layouts.

Related article [arrow_downward](#)

Behaviorlink

Transitions

Cards can transform to reveal additional content. Transition choreography is a coordinated sequence of motion that maintains user focus as the interface adapts. Related Link...

Cards use a container transform transition pattern to reveal additional content.

A card expands to fill the full screen using a parent-child transition.

Do Expand a card to reveal information.

Don't Cards don't flip over to reveal information.

Choreography

Transition choreography is a coordinated sequence of motion that maintains user focus as the interface adapts.

[Related link](#) `arrow_downward`

Surfaces

Material Design has three-dimensional qualities that are reflected in its use of surfaces, depth, and shadows.

[Related article](#) `arrow_downward`

Elevation

On mobile, a card's default elevation is 1dp, with a raised dragged elevation of 8dp. On desktop and mobile, cards can have a resting elevation...

On mobile, a card's default elevation is most often 1dp, but can be 0dp in order to have fewer shadows on denser screens. In either case, the card's raised dragged elevation is 8dp.



A shadow helps indicate a card.

On desktop, cards have a default resting elevation of 0dp and elevate to 4dp on hover.



A stroke of 0dp helps indicate a card.

Gestures

Gestures should be implemented consistently within a card collection. Frequently used gestures on cards include swipe, pick up and move, and scrolling. A swipe gesture...

Gestures should be implemented consistently within a card collection. Frequently used gestures on cards include swipe, pick up and move, and scrolling.

Swipe

A swipe gesture can be performed on a single card at a time, anywhere on that card.

It can be used to:

- Dismiss a card
- Change the state of a card (such as flagging or archiving it)

DoA card should only have one swipe action assigned to it.

Don'tCards should not contain swipeable content (such as an image carousel or pagination). Swipe gestures should also not cause portions of cards to detach upon swipe.

Pick up and move

The pick up and move gesture allows users to move and re-order cards in a collection.

Do When moving a card, increase its elevation.

Don't Don't move cards behind other cards.

Don't Don't let cards bump other elements out of the way. When a card is picked up, it appears in front of all elements (except app bars and navigation).

Scrolling

Card content that is taller than the maximum card height is truncated and does not scroll, but can be displayed by expanding the height of a card. A card can expand beyond the maximum height of the screen, in which case the card scrolls within the screen.

Do On mobile, cards can expand to reveal more content, scrolling within the screen. Content within cards doesn't scroll.

Don't On mobile, cards cannot internally scroll, as it could cause two scroll bars to be displayed.

Do On desktop, card content can expand and scroll within a card.

Scaling and adaptation

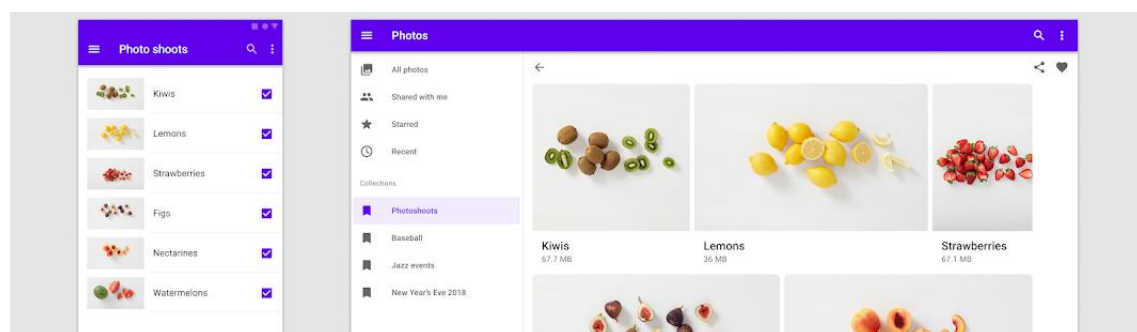
As cards scale to adapt to different screen sizes, their position and alignment can also change.

As cards scale to adapt to different screen sizes, their position and alignment can also change.

Cards and their elements can align left, right, or center as the layout scales. They can also have a fixed position, like FABs or navigation drawers.

Ergonomics

Adjust the layout of components to meet the ergonomic needs of large screen devices. For example, a horizontally oriented card on a mobile screen may become a larger, vertically-oriented card on larger screens, lending more space to imagery and typography to fit the larger form factor.



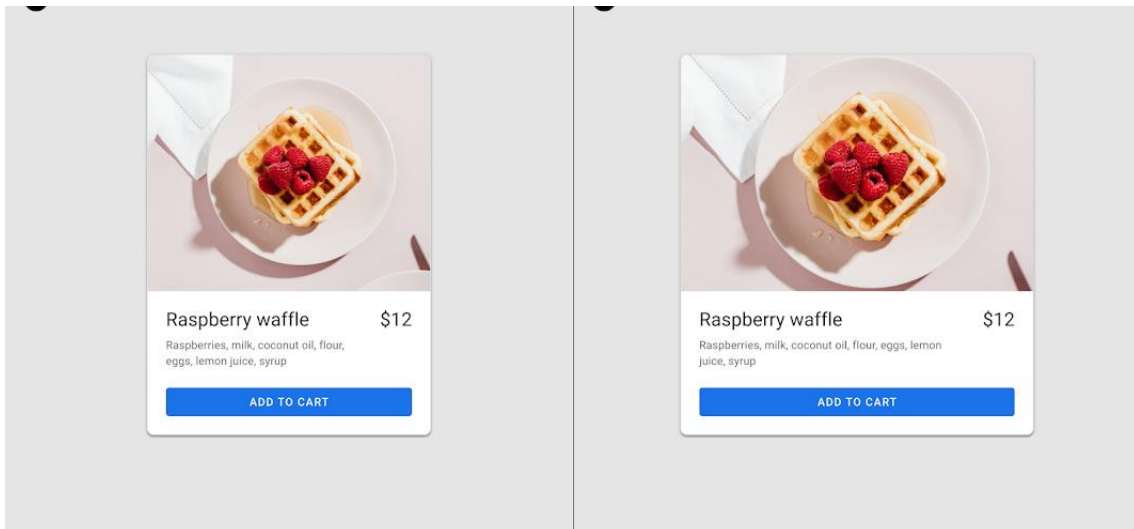
Example of list items becoming full cards in the adaptation from mobile to tablet.

Adapting presentation

When a component switch isn't needed, varying the presentation of the same content-focused component can also help serve a given context, such as making a card horizontally oriented on desktop screens. Use caution to avoid confusing user expectations for how the component behaves.

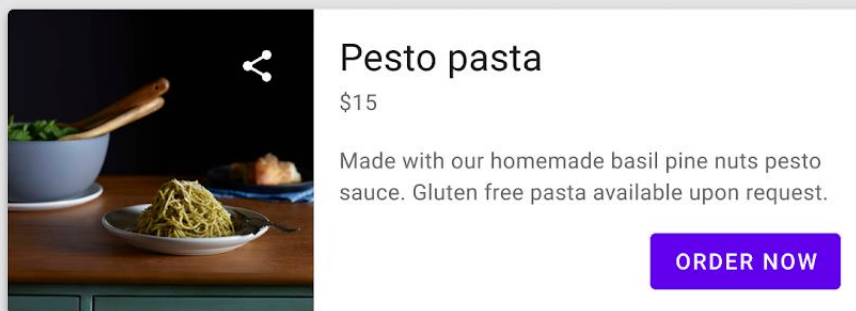
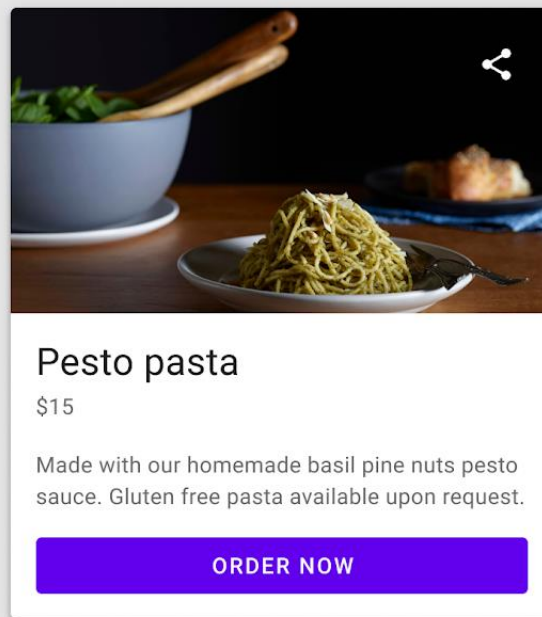
Visual presentation

To adjust the presentation of content-focused components, begin with spacing. Allow components like lists, cards, and images to optimize space while filling the region of a screen that suits a device breakpoint's ergonomic needs.



Define fluid dimensions for cards, lists, and image lists.

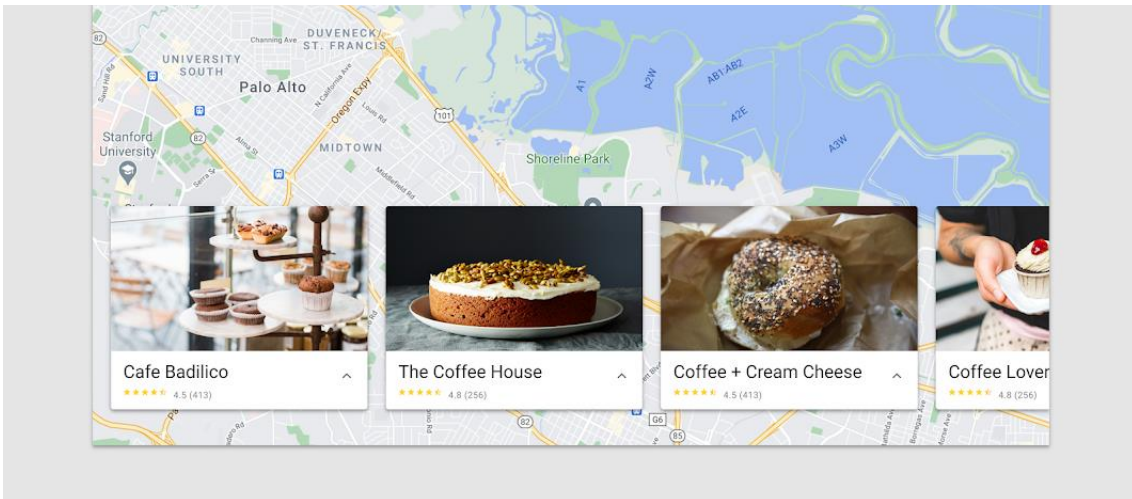
The internal composition of a card can adjust for large screens.



Example of the same card with two different orientations and element positioning.

Column-based layouts

In mobile layouts, components such as lists or cards are stretched to fit the full width of the screen without compromising visual or ux qualities. When designing for large screens, use multiple columns to display content. Avoid extending UI elements across the screen whenever possible. Groups of related cards can be rearranged to become horizontal rows or carousels, allowing for better content organization on larger screens.



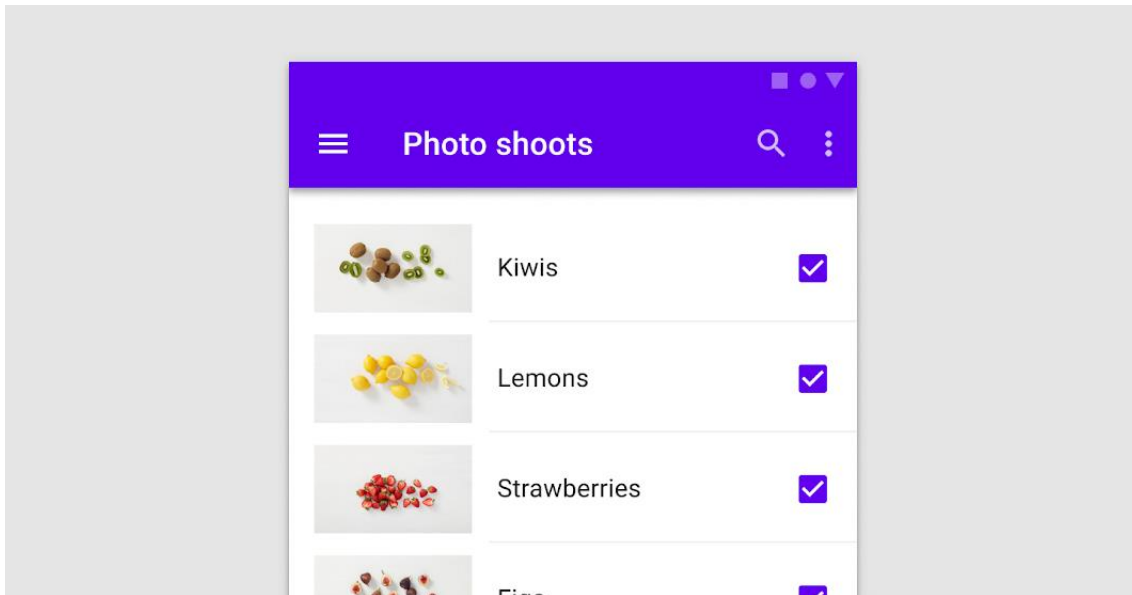
Example of a group of related cards in a carousel.

Component swapping

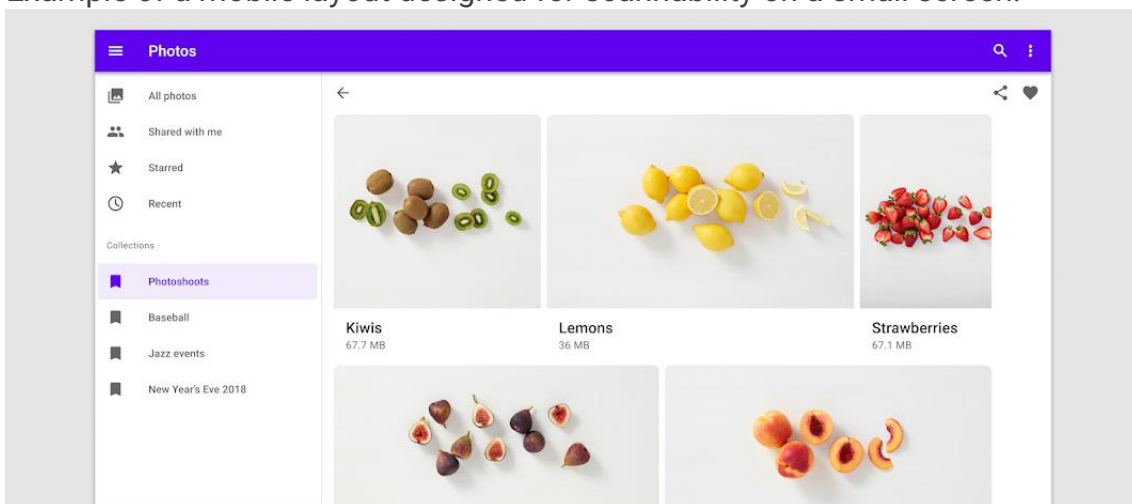
Component swapping means that functionally equivalent components can be swapped to make larger-scale changes to the ergonomic and functional qualities of an interface.

Device breakpoints are the primary indicators for an interface to trigger a component swap that will better match the device or user context. Certain devices or user contexts require different components to meet platform expectations, device constraints, or ergonomic concerns. When swapping components, ensure that each component's function is clear and aligns with user expectations for the given context.

As screen sizes increase, there are new opportunities for text and image compositions; in large screens you can use more space for images and text. Given the flexibility needed for these components to support multiple types of content, lists and cards can be swapped when scaling to larger screens, but use caution that list controls and other component-specific elements can be maintained.



Example of a mobile layout designed for scannability on a small screen.



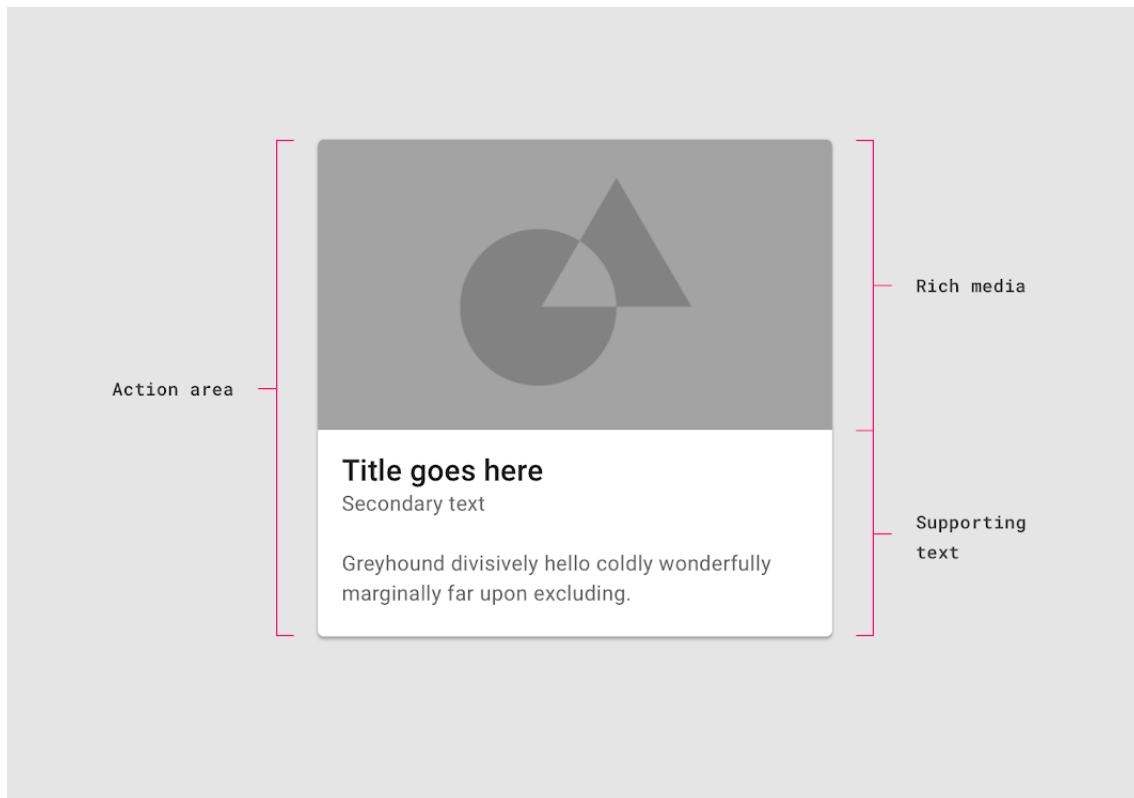
Example of list of items expanding into a large image list. Large screen layouts accommodate more immersive imagery and expressive typography.

Actionslink

Primary action

The primary action area of a card is typically the card itself. Often cards are one large touch target to a detail screen on a...

The primary action area of a card is typically the card itself. Often cards are one large touch target to a detail screen on a subject.



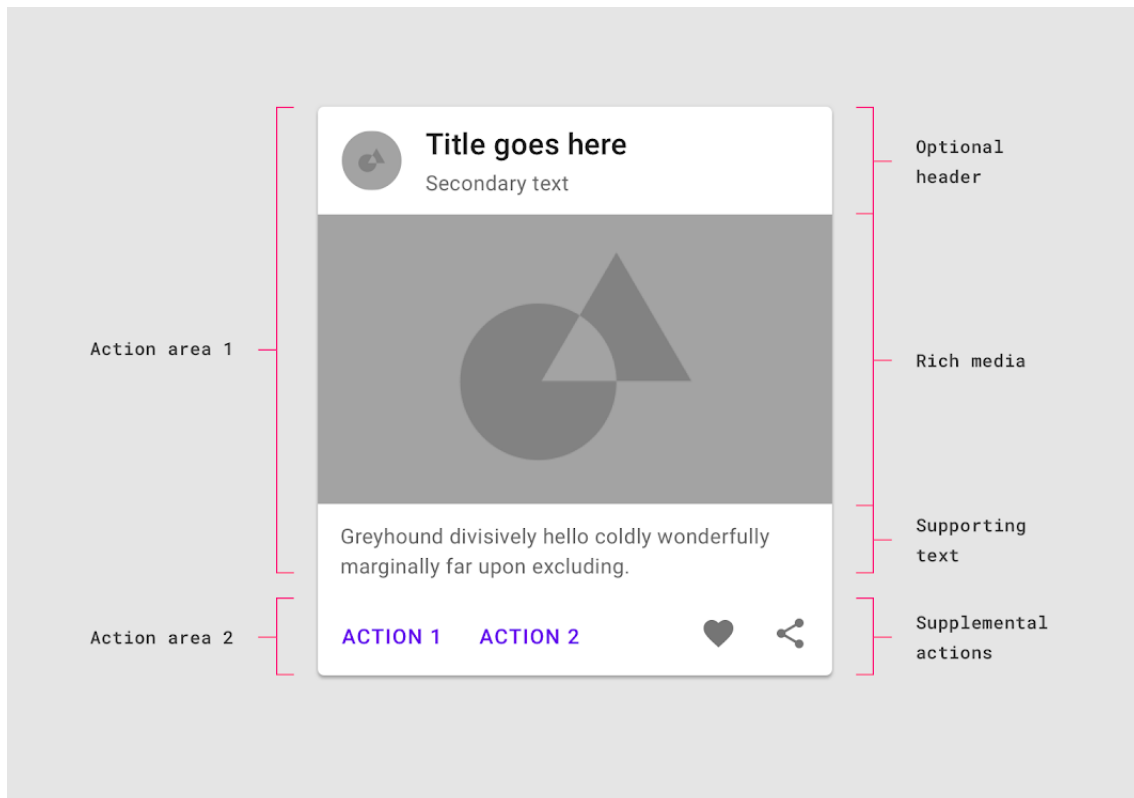
The action area of a card contains rich media and supporting text.

Supplemental actions

Supplemental actions are represented by icons, text, and UI controls on cards. They are typically placed at the bottom of the card. For more than...

Supplemental actions are represented by icons, text, and UI controls on cards. They are typically placed at the bottom of the card.

For more than two supplemental actions, use an overflow menu instead.

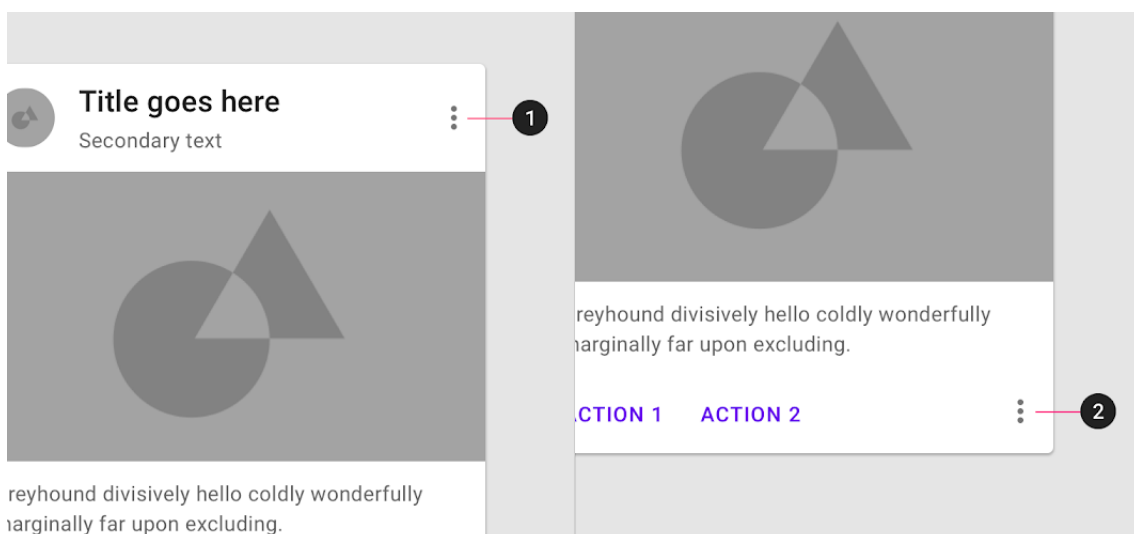


Supplemental text and actions at the bottom of the card

Overflow menu

Overflow menus contain related actions. They are typically placed in the upper-right or lower-right corner of a card.

Overflow menus contain related actions. They are typically placed in the upper-right or lower-right corner of a card.



Overflow menus are usually located in the upper-right or lower-right corner of a card.

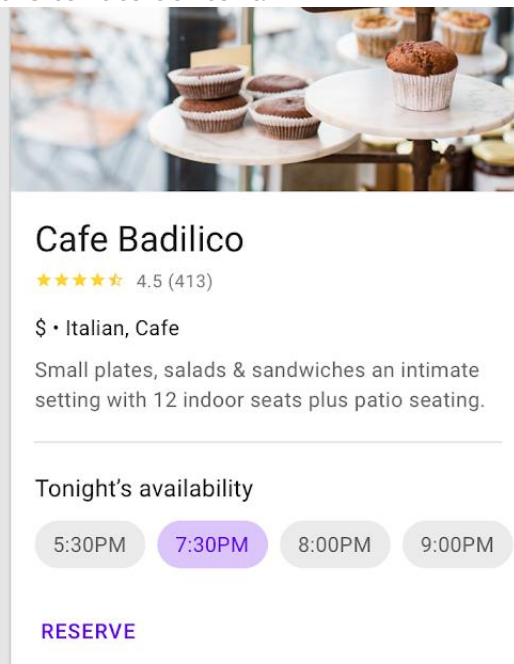
UI controls

UI controls can be included within a card to allow the user to interact with a card's content. UI controls may be in the form...

UI controls can be included within a card to allow the user to interact with a card's content. UI controls may be in the form of a slider, stars to rate content, chips, or buttons.



This card contains stars to rate content.

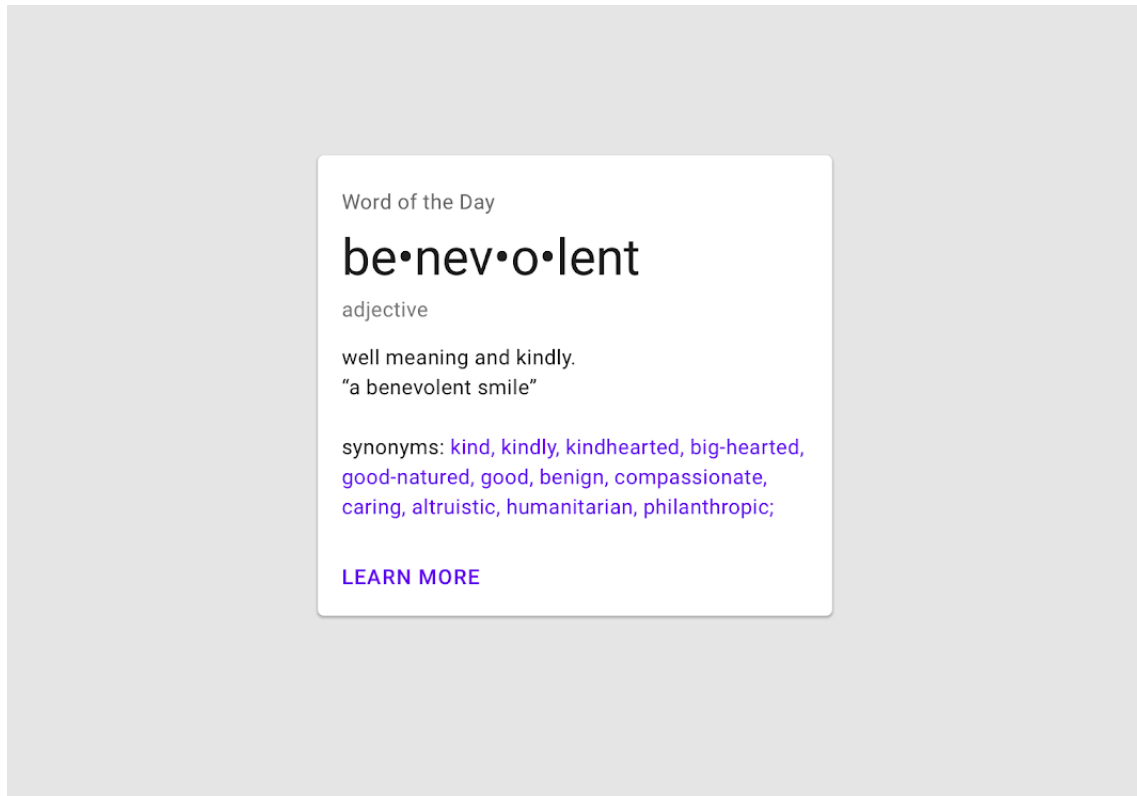


This card contains choice chips within the action area.
This card contains a slider control within the action area.

Additional actions

Cards can support multiple actions, such as UI controls and an overflow menu. Because cards are entry points to more detailed information, they should contain...

Cards can support multiple actions, such as UI controls and an overflow menu. Because cards are entry points to more detailed information, they should contain a limited number of actions.



Caution Cards provide entry to more robust information. Be cautious not to overload cards with extraneous information or actions.

Focus

When traversing through focus points on a card, visit each focused element before moving to the next card. For users that navigate solely using focus...

When traversing through focus points on a card, visit each focused element before moving to the next card.

For users that navigate solely using focus traversal (using a D-pad and keyboard), cards should have either a primary action or open a new screen containing primary and supplemental actions.

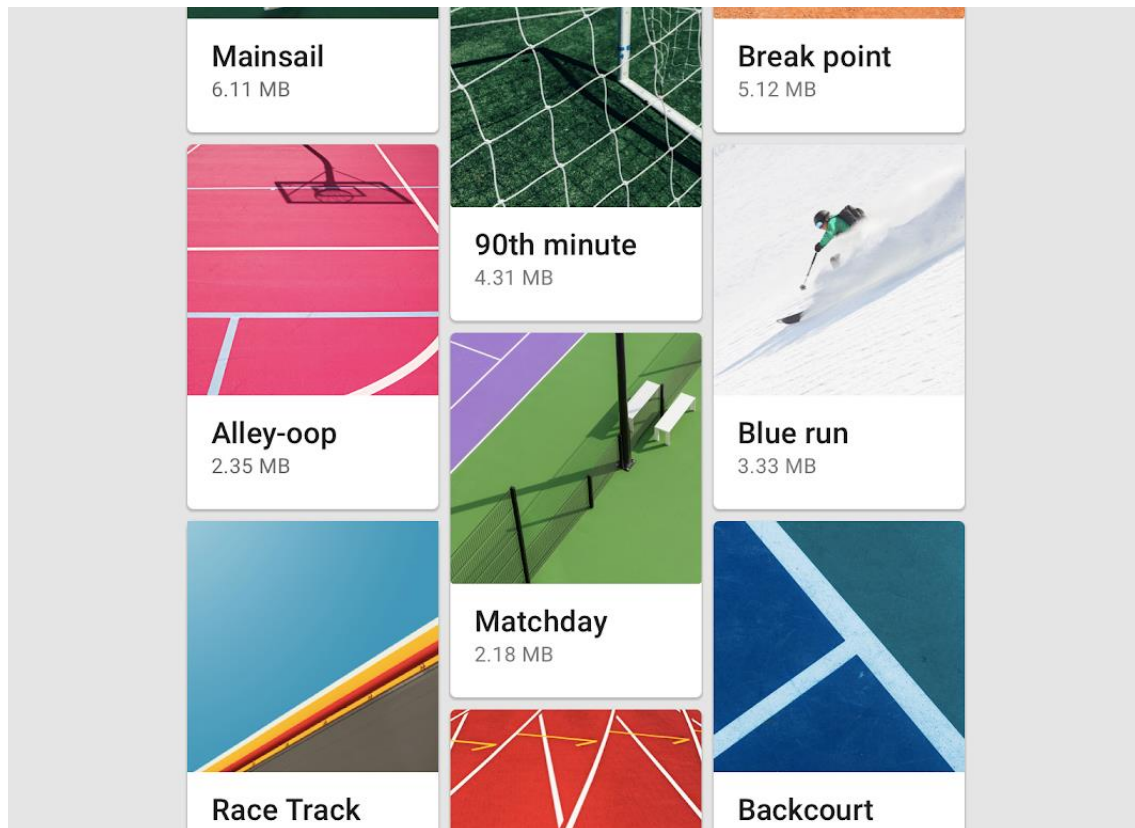
Focus traversal of a card

Card collectionslink

Usage

When multiple cards are present, they are grouped together into one or more collections. By default, cards in a collection are coplanar, sharing the same...

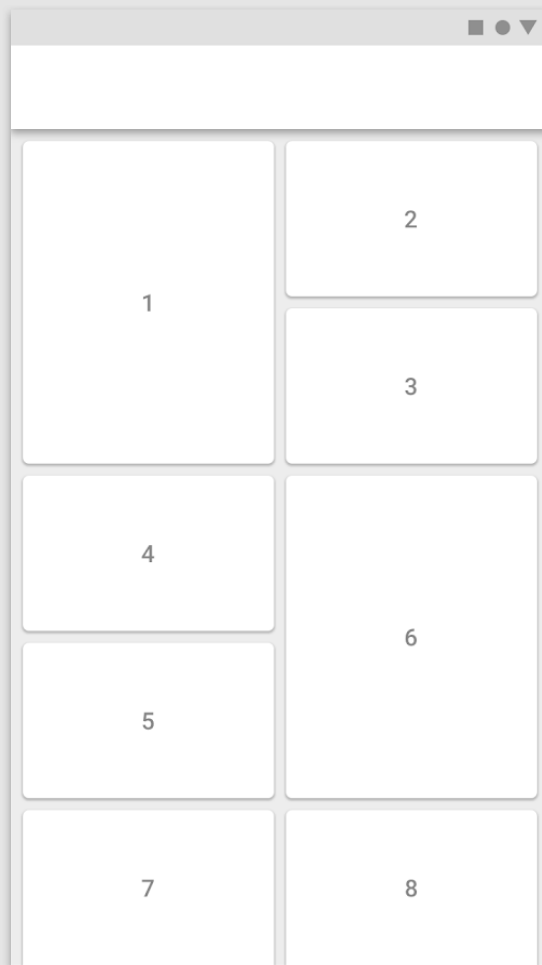
When multiple cards are present, they are grouped together into one or more collections. By default, cards in a collection are coplanar, sharing the same resting elevation unless they are picked up or dragged.



Layout

Organize card collections in a way that makes cards useful. How cards are laid out affects how they are perceived and used.

Organize card collections so that they are easy to use. Their layout affects how they are perceived.



When adding cards to a collection, the first item is automatically positioned on the top left. Subsequent cards are laid out left to right, top to bottom.

Scannable

To make a collection of cards scannable, place them in a consistent pattern.

Scannable cards



Collection



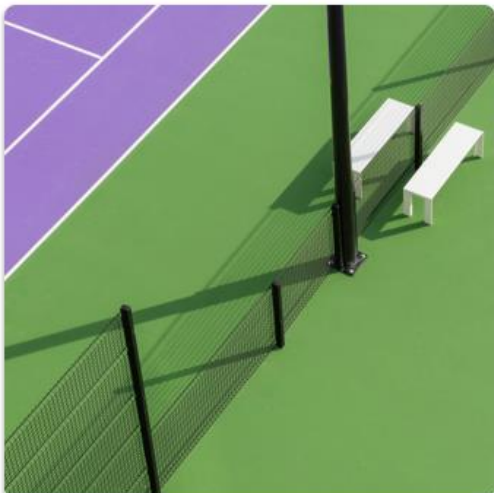
90th minute

4.31 MB



Break point

5.12 MB



Matchday

2.18 MB



Blue run

3.33 MB



Dashboard

To display multiple subject matters and functions on a screen, use a dashboard-style card collection.

Dashboard-style card collection



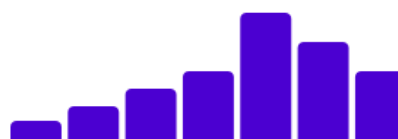
Marketing

123.4 M

Conversion

537

+22% of target



Conversion

432.1 M

+12.3% of target



Sales

345.8 M

+11% of target

Users

45.5 M

Avg. session

4:53 H

+56.6% of target

Sessions

23,242

Bounce rate

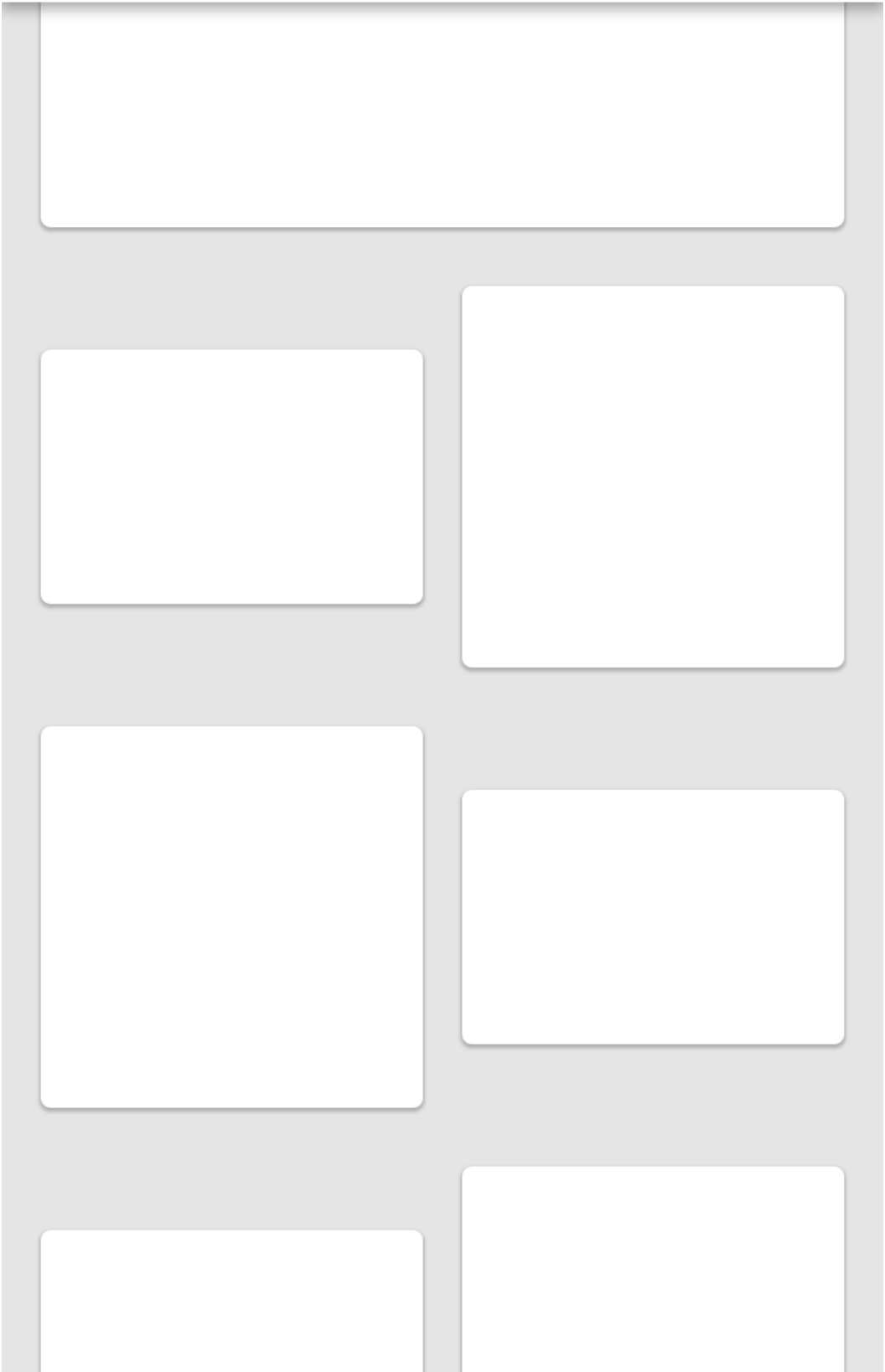
12%

Pageviews

Mobile traffic ratio

Distinction

To highlight each card's individuality, style, or novelty, use a card collection with an asymmetric grid.



Cards in an asymmetric grid

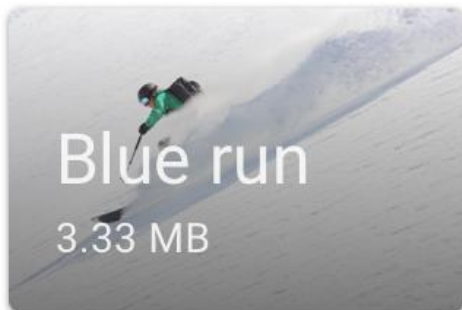


Feed



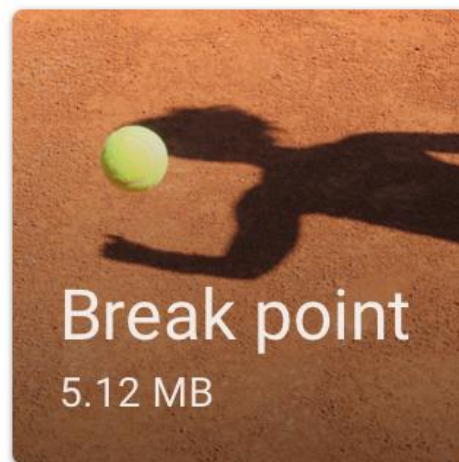
90th minute

4.31 MB



Blue run

3.33 MB



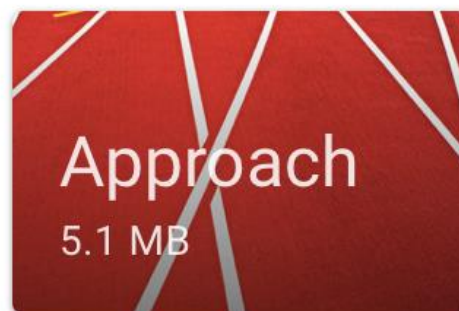
Break point

5.12 MB



Mainsail

6.11 MB



Approach

5.1 MB



Backcourt



Contained collections

Card collections can be placed within a container, and be scrolled within it.

Card collections can be placed within a container, and be scrolled within it.

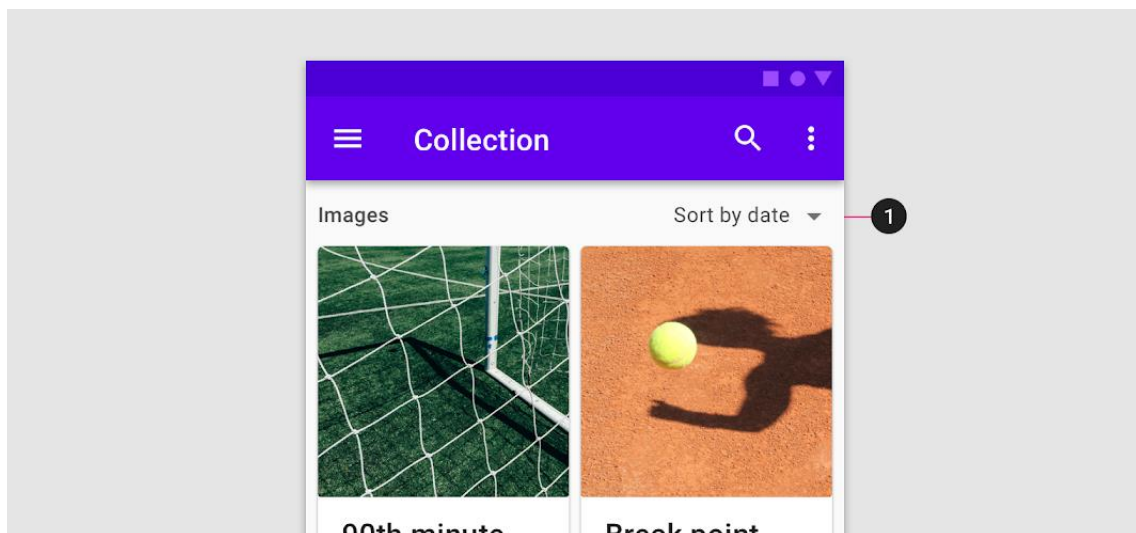
DoA card collection can horizontally scroll within a container.

Don'tThe container for a collection should not be a card, and the entire surface area of the container should not be interactive.

Filtering and sorting

Card collections can be filtered in a variety of ways, including by date or alphabetical order. If a collection can be filtered, the filter must...

Card collections can be filtered in a variety of ways, including by date or alphabetical order. If a collection can be filtered, the filter must apply to each card in the collection.



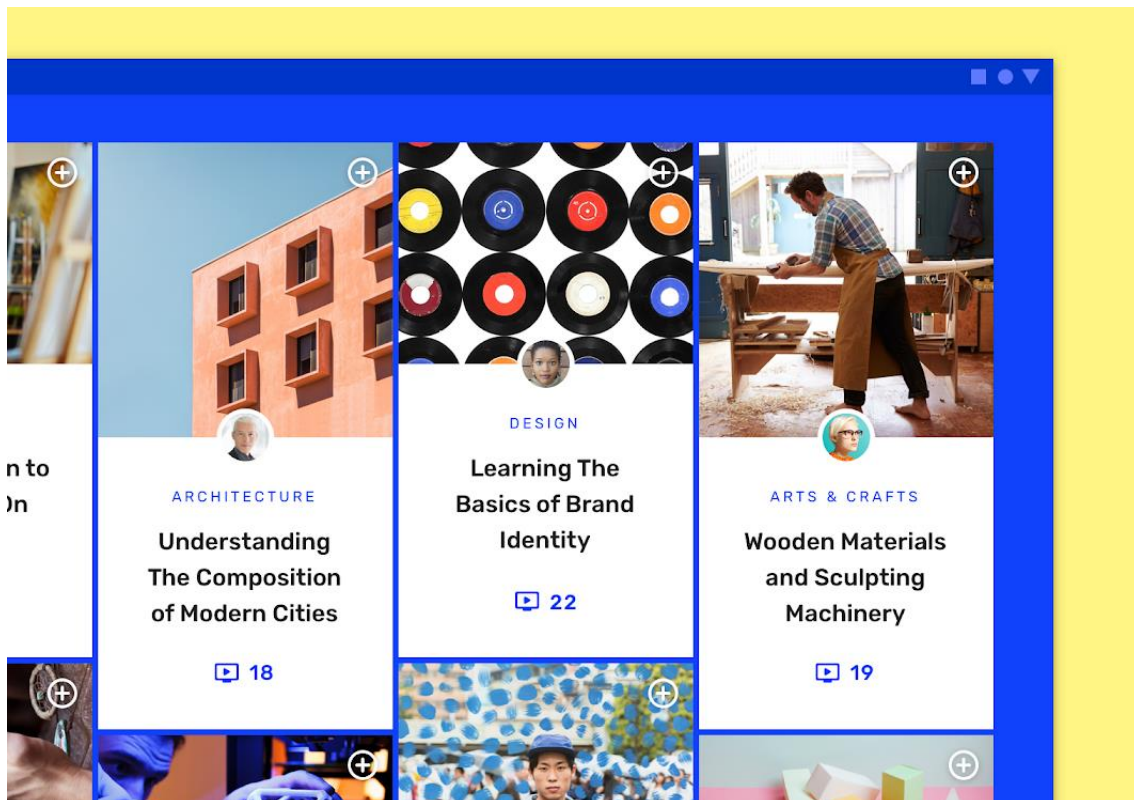
Filter or sorting options should be placed outside of the card collection.

Theminglink

Owl Material theme

This educational app's cards have been customized using Material Theming. Areas of customization include color, typography, and shape. Owl is an educational app that provides...

This educational app's cards have been customized using Material Theming. Areas of customization include color, typography, and shape.



Owl's customized cards

Owl

Owl is an educational app that provides courses for people who want to explore and learn new skills.

[Related article](#)

The color system

Create a color theme that reflects your brand or style

[Related article](#)

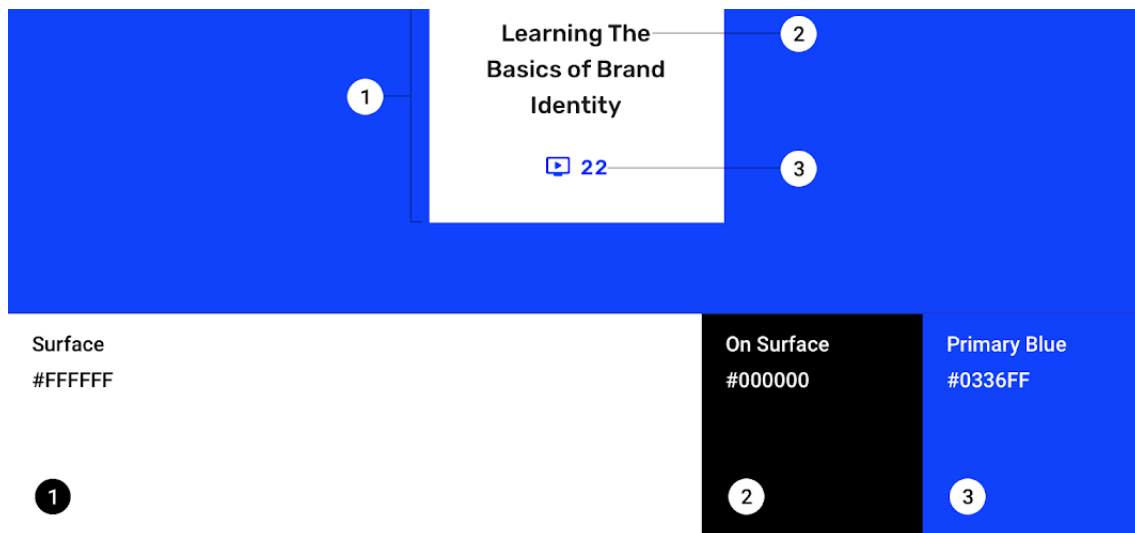
Applying color to UI

In a UI, color has a variety of roles: from containing meaning, to expressing a look and feel.

[Related article](#)

Color

Owl's cards use custom color on three elements: the container, text, and icon.



Element	Category	Attribute	Value
Container	Background	Color Opacity	#0336FF 100%
Text, Icons	On Background	Color Opacity	#FFFFFF 100%

Understanding typography

Typography is critical in establishing hierarchy and expressing brand presence that supports an effective digital experience.

[Related article](#)

Typography

Owl's cards use custom typography for the card title, number, and category text.

Rubik Medium 16	H6 Headline	Learning The Basics of Brand Identity
Rubik Medium 14	Subtitle 1	22
Rubik Regular 10 CAPS	Subtitle 2	DESIGN
	OVERLINE	

Element	Category	Attribute	Value
Title	Subtitle 1	Typeface Font Size Case	Rubik Medium 16 Title case
Number	Subtitle 2	Typeface Font Size Case	Rubik Medium 14 Title case
Category	Overline	Typeface Font Size Case	Rubik Regular 10 All caps

About shape
[Direct attention, identify components, communicate state, and express brand](#)

[Related link](#) 

Shape

Owl's cards use a custom container shape, with a 0dp corner radius.

Reply

Reply is an email app that uses Material Design components and Material Theming to create an on-brand communication experience.

Related article[arrow_downward](#)

The color system

Create a color theme that reflects your brand or style

Related article[arrow_downward](#)

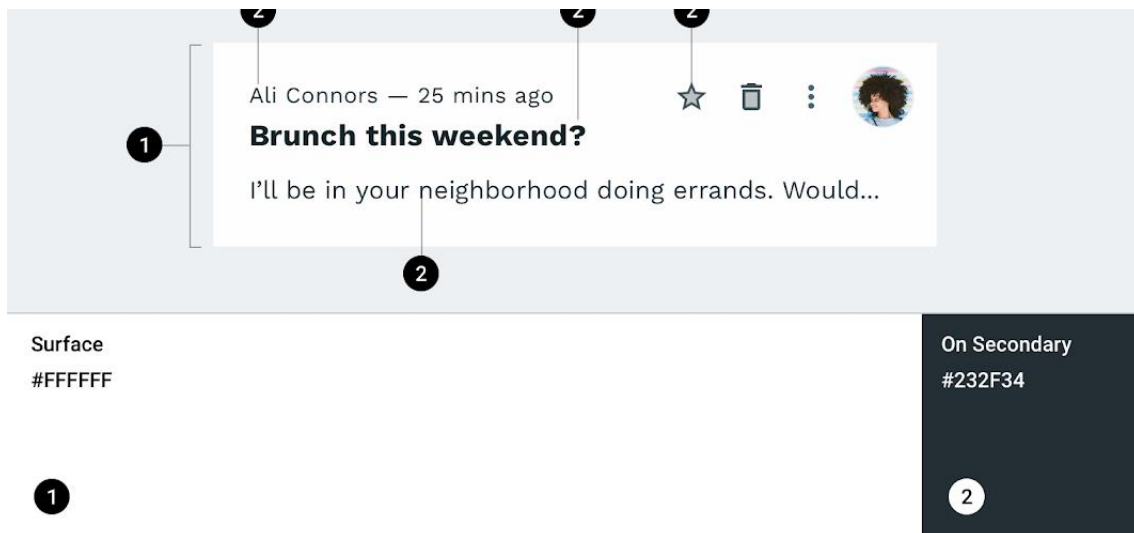
Applying color to UI

In a UI, color has a variety of roles: from containing meaning, to expressing a look and feel.

Related article[arrow_downward](#)

Color

Reply's cards use custom color on six elements: the container, metadata text, title text, body text, icon, and icon fill.



Element	Category	Attribute	Value
Container	Surface	Color Opacity	#FFFFFF 100%
Metadata text	On Secondary	Color Opacity	#232F34 100%
Title text	On Secondary	Color Opacity	#232F34 100%
Body text	On Secondary	Color Opacity	#232F34 100%
Icon	On Secondary	Color Opacity	#232F34 100%
Icon fill	On Secondary	Color Opacity	#232F34 30%

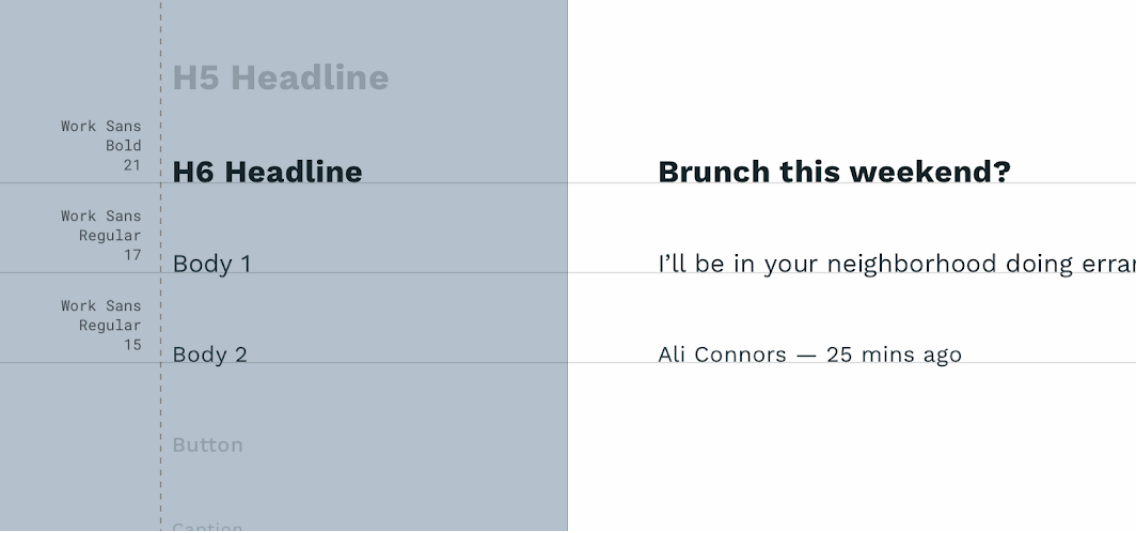
Understanding typography

Typography is critical in establishing hierarchy and expressing brand presence that supports an effective digital experience.

[Related article](#) 

Typography

Reply's cards use custom typography for the card title, body, and metadata text.



Element	Category	Attribute	Value
Title	H6	Typeface Font Size Case	Work Sans Bold 21 Sentence case
Body	Body 1	Typeface Font Size Case	Work Sans Regular 17 Sentence case
Metadata	Body 2	Typeface Font Size Case	Work Sans Regular 15 Sentence case

About shape
Direct attention, identify components, communicate state, and express brand

Related linkarrow_downward

Shape

Reply’s cards use a custom container shape, with a 0dp corner radius.

-
-
- 80

- 16Measurement 16
- 28Measurement 28
- 8Measurement 8
- 40Measurement 40

Title goes here

Secondary line text Lorem ipsum
dolor sit amet

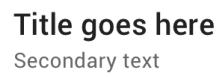


[ACTION 1](#) [ACTION 2](#)

-
-
-
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- 382Measurement 382
- 344Measurement 344
- 16Measurement 16
- 72Measurement 72
- 72Measurement 72
- 116Measurement 116
- 34Measurement 34
- 22Measurement 22
- 28Measurement 28
- 8Measurement 8
- 8Measurement 8
- 24Measurement 24

- 344194
- 40
-
-



ACTION 1 ACTION 2

•	510	Measurement	510
•	194	Measurement	194
•	0	Measurement	0
•	344	Measurement	344
•	32	Measurement	32
•	26	Measurement	26
•	36	Measurement	36
•	1	Measurement	1
•	24	Measurement	24
•	14	Measurement	14
•	20	Measurement	20
•	16	Measurement	16
•	24	Measurement	24
•	32	Measurement	32
•	8	Measurement	8
•	8	Measurement	8
•	44	Measurement	44
•	24	Measurement	24





Outlined cards

●	40Measurement	40
●	24Measurement	24
●	24Measurement	24
●	16Measurement	16
●	16Measurement	16

- 80
-
-

- 16Measurement 16
- 8Measurement 8
- 8Measurement 8
- 16Measurement 16
- 1Measurement 1

OVERLINE

Headline 5

Greyhound divisively hello coldly
wonderfully...



BUTTON

BUTTON